

# **DIFLUOROETHANE**

**UN 1030** 

Shipping Name: 1,1-Difluoroethane, R152a

Other Names: 1,1,-Difluoroethane

Ethylene fluoride Freon 152



## **WARNING!** • EXTREMELY FLAMMABLE!

#### Hazards:

- Container may BLEVE or explode when exposed to fire
- Vapors are heavier than air and will collect and stay in low areas
- Vapors may travel long distances to ignition sources and flashback
- Vapors in confined areas (e.g., tanks, sewers, buildings) may explode when exposed to fire
- Irritating to skin, eyes, nose and lungs
- Contact with liquid may cause frostbite
- Combustion products include the toxic gases hydrogen fluoride

# Awareness and Operational Level Training Response:

- Stay upwind and uphill
- Determine the extent of the problem
- Isolate the area of release or fire and deny entry
- Remove all ignition sources
- For container exposed to fire evacuate the area in all directions because of the risk of BLEVE
- Evacuate the immediate area and downwind for a large release
- Notify local health and fire officials and pollution control agencies
- If material or contaminated runoff enters waterways, notify downstream users of potentially contaminated water

# **Description:**

- Colorless gas
- No odor
- Shipped and stored as a liquefied compressed gas
- May boil on the surface of water and is insoluble in water
- Extremely flammable
- Vapors are heavier than air and will collect and stay in low areas
- A liquid below -13° F
- Produces large amounts of vapor

# **Operational Level Training Response:**

RELEASE, NO FIRE:

- Stop the release if it can be done safely from a distance
- Use large amounts of water to disperse vapors contain runoff
- Ventilate confined area if it can be done without placing personnel at risk

#### FIRE:

- Do not extinguish the fire unless the flow of the gas can be stopped and any remaining gas is out of the line. Specially trained personnel may use fog lines to cool exposures and let the fire burn itself out
- Cool exposed noncryogenic liquid containers with large quantities of water from unattended equipment or remove intact containers if it can be done safely
- If cooling streams are ineffective (venting sound increases in volume and pitch, tank discolors or shows any signs of deforming), withdraw immediately to a secure location
- DO NOT APPLY WATER TO CRYOGENIC LIQUID CONTAINERS; if cryogenic liquid containers are exposed to direct flame or elevated temperatures for prolonged times, withdraw immediately to a secure location

### First Aid:

- Provide Basic Life Support/CPR as needed
- Decontaminate the victim as follows:
  - ♦ Inhalation remove the victim to fresh air and give oxygen if available
  - Skin remove and isolate contaminated clothing (including shoes) and wash skin with soap and large volumes of water for 15 minutes
  - Eye rinse eyes with large volumes of water or saline for 15 minutes
- Seek medical attention
- Frostbite warm injured area in very warm water
- For skin burns decontaminate with water and apply a clean dry dressing

CAS: 75-37-6